



United States
Department of
Agriculture

Intermountain
Region

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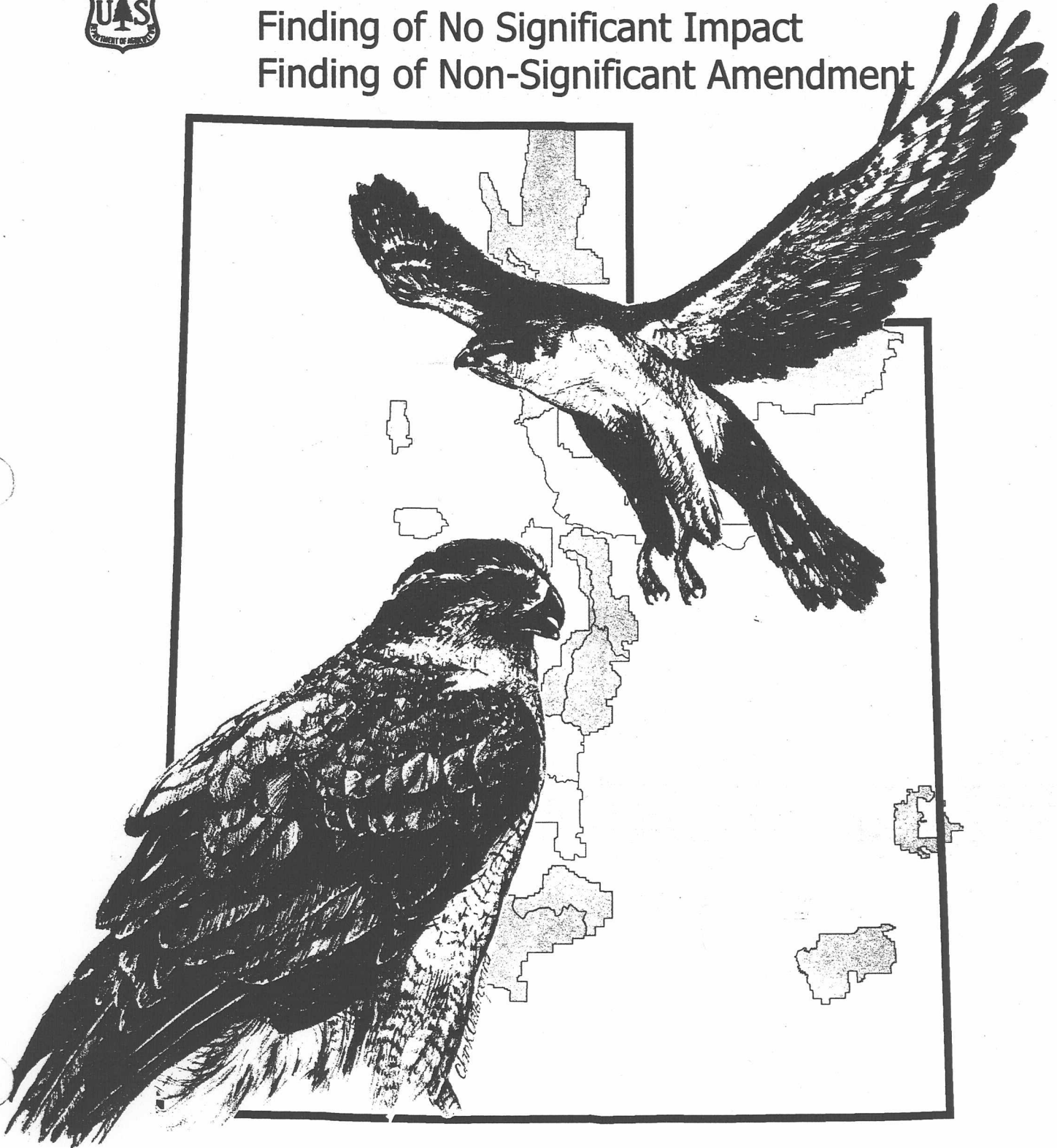
Utah

Northern Goshawk Project

Decision Notice

Finding of No Significant Impact

Finding of Non-Significant Amendment



**DECISION NOTICE
FINDING OF NO SIGNIFICANT IMPACT
AND
NON-SIGNIFICANT AMENDMENT
OF THE
FOREST PLANS IN UTAH
FOR THE
UTAH NORTHERN GOSHAWK PROJECT
USDA FOREST SERVICE
Intermountain Region**

Ashley, Dixie, Fishlake, Manti-LaSal, Uinta and Wasatch-Cache National Forests

Utah Counties: Beaver, Box Elder, Cache, Carbon, Daggett, Davis, Duchesne, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Morgan, Piute, Rich, Salt Lake, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Utah, Wasatch, Washington, Wayne, and Weber

Wyoming Counties: Sweetwater and Uinta

Colorado Counties: Mesa and Montrose

1. Background

An environmental assessment has been prepared that summarizes the analysis completed for a proposed change in programmatic management direction for the six National Forests in Utah, relative to management direction in northern goshawk (hereinafter referred to as goshawk) habitat. The Utah Northern Goshawk Project Environmental Assessment (EA) was distributed for public comment and review in October 1999. The proposal and action alternatives would amend the Land and Resource Management Plans (forest plans) for each National Forest in Utah by adding management direction in the form of goals and objectives, standards and guidelines to be applied to management activities that could affect goshawk habitat. These amendments would remain in effect until each forest plan is revised, estimated to be within the next four years. The affected lands are located primarily in Utah, with small portions in Wyoming and Colorado (EA, Chapter 1, section 1.4.1). This amended direction will maintain options for goshawk habitat management by reducing the risk of potential negative impacts to habitat.

The programmatic direction will be mandatory and enforceable. The intent is to address the new information found in the "Habitat Assessment and Management Recommendations for the Northern Goshawk in the State of Utah" (Graham et al. 1999) and "Conservation Strategy and Agreement for Management of Northern Goshawk Habitat in Utah" (Utah NFs et al. 1998), and provide consistency in management direction that will narrow the management interpretations currently possible (EA, Chapter 1, section 1.3). Proposed direction would provide programmatic mitigation measures for potential environmental effects that may result from future projects and activities. None of the alternatives considered would make an irretrievable or irreversible commitment of resources (EA, Chapter 1, section 1.6). Additional mitigation measures may be added to particular projects as a result of site-specific conditions during project-level analysis, or refinements made to measures in this proposal.

Because this action would mitigate future environmental effects, the indirect effects are expected to be beneficial. Chapter 4 of the EA (sections 4.4 and 4.5) identifies the possibility of localized, indirect social and economic effects. These social and economic effects are not significant and do not require the preparation of an environmental impact statement, as discussed in section 5 of this decision notice.

2. Decision

I have selected Alternative F as the management direction to guide activities in goshawk habitat until the forest plans are revised. Alternative F concentrates activities on maintenance and restoration of habitat areas at risk to maintain the connectivity of habitat and capability to support viable populations of goshawks across the National Forest System lands in Utah. This alternative provides the greatest opportunity to minimize any further degradation of goshawk habitat and loss of future management options until the forest plans in Utah are revised.

Alternative F provides guidance for local managers to assess their habitat conditions at a landscape level and determine where the greatest needs for restoration and maintenance treatments exist. The objective is that each Forest in Utah prioritize treatment on at least 1000 acres per year to work toward this short-term goal focused on maintenance or restoration of habitat at risk, until the forest plans are revised. Alternative F also emphasizes management of plant communities important for goshawk prey species. The standards and guidelines that will be implemented are designed to protect goshawk habitat during all management activities, particularly in the nest and post-fledgling areas. The monitoring items that are included in Alternative F will continue to update our information and work toward adaptive management strategies for goshawks and their prey.

The focus in Alternative F regarding grazing is to change grazing practices only in those areas where landscape assessments determine grazing is a factor in putting a landscape "at-risk" relative to habitat needs of goshawk. Monitoring elements include assessing whether appropriate adjustments are being made in identified "at risk" locations (EA, Appendix B). Alternative F also specifies mitigation measures to be implemented for all management activities, whether vegetation treatments or issuing special use permits, to protect goshawk nest areas and foraging habitat. Clarification of desired habitat conditions for prey species has been added in Appendix AA (attached) to help field personnel envision what conditions we are trying to achieve.

In selecting Alternative F, I considered the following factors:

a. Laws, regulations & policies. The National Forest Management Act (NFMA) and implementing regulations (36 CFR 219) require that wildlife habitat be managed to maintain viable populations of existing native vertebrate species. To assure that viable populations will be maintained, habitat must be provided to support a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area. When the forest plans in Utah were developed during the 1980s, the management direction was designed to meet this requirement.

The goshawk was listed by the Forest Service as a sensitive species in the Intermountain Region in 1991 and is also listed as a sensitive species by the Utah Division of Wildlife Resources (EA, section 1.2). New information, triggered by Graham et al. (1999) recommended that updated

management direction be adopted to maintain and restore habitat for viable populations of goshawks in Utah. This was a key part of the purpose and need for this project to amend the national forest plans.

To varying degrees, each National Forest within the State of Utah has inventoried for goshawks and monitored known territories since at least 1992. Data obtained from these studies was used in the development of "The Northern Goshawk in Utah: Habitat Assessment and Management Recommendations" (Graham et al 1999). Results of these monitoring studies on National Forest System lands were unable to detect a decline in territory occupancy.

The "Conservation Strategy and Agreement for Management of Northern Goshawk Habitat in Utah", a cooperative effort with the Utah National Forests, Bureau of Land Management, Utah Division of Wildlife Resources and United States Department of Interior, Fish and Wildlife Service (Utah NFs et al. 1998) explains that managers rarely have all information needed to conduct a fully quantitative population viability analysis (PVA). In the face of missing information, one practical alternative is to use inventories of the quality and quantity of suitable habitat as a surrogate for PVA. For the goshawk, this surrogate analysis for PVA is documented in the "Habitat Assessment and Management Recommendations for the Northern Goshawk in the State of Utah" (Graham et al. 1999). Within the National Forests in Utah, there is systematic statewide monitoring that is described on page 10 of the Conservation Strategy. These documents are discussed in Chapter 1 of the EA.

By focusing management on those areas at the greatest risk of dropping from high and optimum habitat to low or moderate habitat, Alternative F prevents habitat loss and prioritizes management action to conserve goshawks in Utah. This contributes to on-going interagency efforts to prevent the goshawk from being listed as threatened or endangered.

b. Issues. The public issues raised during the EA comment period are addressed in Appendix AA, (attached). I observe that all sides of the issues have been expressed from a variety of people interested in management of the National Forests in Utah. While some people wrote that what we were proposing was unnecessary because goshawks are doing fine in Utah, others wrote that we were not doing enough to protect goshawk habitat. Similarly, some people think that current grazing and timber harvesting practices are not causing any harm to goshawk and its prey habitat, while others think eliminating grazing and timber harvest is necessary to achieve the desired habitat conditions.

The issues are organized in three main categories: science used; process concerns; and other topics of interest. In reviewing these, it strikes me that the disagreement in the scientific community about the "best" management for goshawks was not resolved by developing alternatives that incorporated different components from the different scientific studies. I do note from the comments received that the disagreement is with the differing science, not with the disclosure of the effects in Chapter 4 of the EA. In selecting Alternative F, I have determined that the recommendations from the Reynolds (et al 1992) and Graham (et al. 1999) studies are most appropriate for our situation in Utah because:

- i) The Reynolds study on the Kaibab Plateau is the longest running goshawk study, (Reynolds et al. 1992)
- ii) The Reynolds study is based on many similar habitat conditions as those found in the State of Utah, and the Graham (Graham et al 1999) is specific to Utah.
- iii) Dr. Reynolds is a well known raptor scientist who is renowned for his work in goshawk ecology.

One main point of the disagreement among scientists concerns how much canopy closure is adequate and whether clumps of trees are as useful as more uniform canopy closure for goshawks. This makes me realize the importance of the monitoring items described in Appendix B of the EA, and our commitment to continue the studies, monitor and adapt our management practices as we continue to learn about the habitat requirements for the goshawk. Other research was discussed and differing opinions recognized within the EA (Chapter 3, section 3.3.4). Further explanations of the different sciences considered follow in Appendix AA, Responses to Comments on the EA.

Many comments reflected the concern that “people are as important as goshawks”. As discussed in Chapter 4 (sections 4.4 and 4.5) of the EA, implementing this new direction will have minimal effects on local communities considering the small number of acres that would be possible to treat over the next four years until the forest plans in Utah are revised. I firmly believe that healthy communities of people cannot occur without healthy, diverse and productive watersheds and ecosystems that the management direction in Alternative F is designed to maintain and restore.

Some people questioned our ability to implement this direction, that guidelines instead of standards provide too much flexibility to local managers and that perhaps the intent is just to continue “business as usual”. As discussed more fully in Appendix AA, while guidelines do provide managers more flexibility to determine how best to implement the direction, the decision not to follow a guideline cannot be made lightly and must be documented during the site-specific decision making process. As projects are implemented, they must be in compliance with the amended direction in the forest plan. The public will have the opportunity at the project-level of decision making to assure the goshawk management direction is applied to meet the needs of each site-specific situation.

As the Plans are revised, I expect much of the direction in this decision will be incorporated, but during the revision process, interdisciplinary teams will integrate a longer-term strategy for goshawk management with other resource direction being revised. This means that some of the longer-term direction found in the other alternatives may appropriately be considered during the revision process. The effects of the longer-term strategy will be fully disclosed during the revision process, and people will again have the opportunity to be involved and provide comment during the revision process.

c. Environmental Documents Considered. In addition to the Utah Northern Goshawk Project EA, I also considered the information in The Northern Goshawk in Utah: Habitat Assessment and Management Recommendations, The Conservation Strategy and Agreement for Management of Northern Goshawk Habitat in Utah, numerous scientific studies, research documents, and the Biological Evaluations and Assessments prepared for the project. Other related environmental documents were taken into account including: the Intermountain Regional Guide and Land and Resource Management Plans (forest plans) and associated National Environmental Policy Act

(NEPA) documents for the six affected national forests. Refer to the literature cited in the enclosed Appendix DD.

3. Alternatives Considered

Six alternatives were developed in detail and are compared in Chapter 2 of the Utah Northern Goshawk Project Environmental Assessment (EA). In addition, three alternatives were eliminated from detailed study, as described on section 2.3.1 of the EA. Some of the comments received on the EA suggested that these alternatives should be considered in detail, but I stand by the reasons they were eliminated from detailed analysis. A brief description of the alternatives considered in detail and my reasons for not selecting these alternatives follow:

Alternative A is the no action alternative, and management would continue as is currently described in each forest plan in Utah. This would not provide the desired consistency in management of goshawk habitat across the state. It does not emphasize some actions needed to maintain or restore habitat for goshawk and its prey and could allow some activities to occur that would degrade habitat.

Alternative B is the proposed action that initially responded to the need to maintain or restore goshawk habitat and provided consistent management direction across the state. It allowed extreme events to occur and looked at more long-term goals for habitat management. In responding to the issues raised during scoping, other alternatives were developed including the preferred alternative (F). Allowing extreme events, while consistent with the historic range of variation, may place landscapes at risk to disturbances that would create an imbalance of structural diversity when considering the desired habitat conditions for goshawk and its prey. Trying to prevent extreme events, as will occur in Alternative F, is a more conservative approach to ensure the sustainability of desired habitat conditions across landscapes. The long-term needs for goshawk management are more appropriately integrated with other resource concerns when each forest plan is revised.

Alternative C is similar to Alternative B, except that extreme events are not desired and management would be designed to prevent large-scale destructive events like wildfire. The concept of clumps of trees to provide canopy cover is introduced in this alternative, and the goals are again long-term. Alternative C did not address directly the concerns about grazing affecting prey habitat for goshawks, as does Alternative F, and again the long-term goals are more appropriately addressed during forest plan revisions.

Alternative D builds on Alternatives B and C, but prescribes a range of canopy closures and opening limits within goshawk home ranges. It also prescribes grazing utilization guidelines and specifies that transportation systems be managed to minimize goshawk territory disturbance. Alternative D would be very prescriptive and leave little discretion to local managers to assess their landscape situations and make site-specific decisions tailored to their unique needs. Because of the many varied situations managers encounter across the state of Utah, I believe it is important to retain some flexibility at the local level. Additionally, Alternative D has the greatest potential to adversely affect local economies in rural Utah because the ability to address local situations would be constrained by its prescriptive nature. Alternative F allows more flexibility to address local situations.

Alternative E applies a different scientific approach to goshawk management by specifying higher canopy closures and small opening limits within the entire goshawk territory. It also would prohibit any treatment of older structural stages and require that locally adapted native seed sources be used in management activities. The concern with *Alternative E* is that it likely is not sustainable. The risk of insect and disease infestations increases when large areas of older structural stages are not managed for patches and a variety of age classes. This could ultimately result in conditions not desirable for goshawks or their prey. It is also not reasonable at this time to require locally adapted native seed sources because of the lack of seed quantity and variety to meet specific needs. Also, the costs of procuring locally adapted seed would be excessive. While it is desirable to use the locally adapted seed in *Alternative F*, it is not mandated because we cannot guarantee the availability. Similar to *Alternative D*, the prescriptive nature of *Alternative E* does not allow the flexibility to address local situations that is part of *Alternative F*.

4. Public Involvement

As described in the EA (Chapter 2, section 2.2), public involvement efforts consisted of a series of open houses and informative post cards to the public and access to the goshawk project information on a web site. Notices were also placed in the Federal Register. Comments received during the scoping process were used to generate the alternatives. The EA was completed in October 1999 and distributed for public review and comment. A list of the individuals and organizations submitting comments on the EA is found in the enclosed Appendix AA.

I have reviewed the public comments on the EA with the Interdisciplinary Team, to determine if there is new information that requires other alternatives or additional analysis prior to my making a decision. Most public comment did not raise new information and many of the concerns were similar to those raised during scoping. While some people were dissatisfied with how we addressed the issues in the analysis, I did not find any new issues that would change our approach to address the needs of the goshawk in Utah.

5. Finding of No Significant Impact (FONSI)

The selected programmatic direction, *Alternative F*, has a relatively broad context by applying management direction to an estimated 8.1 million acres of National Forest System lands within the six Utah National Forests (approximately 7.98 million acres in Utah; 90,000 acres in Wyoming; and, 30,000 acres in Colorado). The alternatives (Chapter 2), affected environment (Chapter 3), and consequences (Chapter 4) are disclosed in the EA. In consideration of the analysis documented in the EA and in light of the reasons set forth below, I find that selection of *Alternative F* as the management direction for northern goshawk habitat in Utah will not significantly impact the human environment.

a. The proposed management direction would be limited in geographic application (40 CFR 1508.27(a)). The proposed management direction applies to projects affecting acres that are forested within the estimated 8.1 million acres of National Forest System lands of the six affected national forests. The amount of land affected by the proposed direction for the remainder of this current planning period (projected to be 4 years) is a small subset of the land since not all lands would have projects generated in that time period. The only activities that were found to affect a

measurable amount of acres at the state scale were timber harvest, wildland fire, and livestock grazing. Based on records from 1990-1997 for acres affected by commercial timber harvest activities and 1994-1998 for wildland fire, the number of acres affected annually is estimated at less than 1% of the total forested acres across the six National Forests. (Chapter 4, section 4.3.1).

Changes to current grazing permits would occur in those landscapes where grazing can be attributed as a causing a deterioration in goshawk habitat. The number of allotments affected would only be those where an assessment determines that wildlife and livestock grazing is a factor in placing a landscape at-risk relative to the habitat needs of the goshawk (Chapter 4, section 4.5.2). The conclusion in the analysis is that the degree of change in terms of acres or permits affected in the projected 4-year period until plans are revised would a small percent of the 539 allotments potentially affected. Depending on the solution, there may be no overall change in actual numbers of animals, but the grazing system may be modified or other management tools applied.

b. The proposed management direction would be limited to certain projects and activities. The management direction in Alternative F applies to proposed and new projects only. Activities promoting goshawk habitat are prioritized in landscapes where habitat conditions for the goshawk are at risk of dropping from optimum and high value habitat for the goshawk, to low or moderate value (as defined by Graham et al. 1999). Projects will be designed to address problems identified as causing the at-risk condition.

Activities in exemption areas (such as wilderness, see Chapter 2, section 2.3.2) are not affected by direction in this proposal. Current forest plan direction still applies in these areas. In addition to exemption areas, any valid, prior existing rights on NFS lands would not be affected by this amendment. Also, locatable, mineral material or leasable mineral activities and facilities that have been authorized for such use under existing plans, licenses or permits, or have been leased or authorized for leasing prior to the decision date of this amendment, will not be affected by this amendment.

Effects to resources would not be significant, given the short time period until the forest plans are revised and the ability to relocate or adjust activities to meet habitat needs for the goshawk without adversely affecting these areas of interest. The proposed management direction would reduce the potential environmental impacts of project decisions from those allowed by current plans. Disclosure of the site-specific effects and public participation will occur prior to the project decision.

c. The proposed management direction will not significantly affect public health or safety (40 CFR 1508.27(b)2)). The proposed management direction does not, on its own, authorize any ground-disturbing activities or direct changes to the environmental status quo. Instead, it provides programmatic direction and mitigation measures to be applied to site-specific projects and activities. Additional mitigation measures may be added to particular projects as a result of site-specific conditions during project-level analysis. New project decisions would be preceded by site-specific NEPA analysis. Alternative F does not have significant effects on human health and safety beyond those already documented in existing forest plan Environmental Impact Statements and the site-specific analyses of on-going projects and activities, or might be identified in such future analyses of proposed projects and activities.

d. The proposed management direction will not significantly affect any unique characteristics of the geographic area (40 CFR 1508.27(b)(3)), does not adversely affect anything listed or eligible for listing in the National Register of Historic Places, nor does it cause loss or destruction of significant scientific, cultural, or historic resources (40 CFR 1508.27(b)(8)). The proposed management direction does not alter the environmental protection afforded such unique lands as is already provided for in the forest plans and may provide improved protection for such resources if they reside within goshawk habitat areas where proposed management direction will be applied.

e. The management direction does not cause effects on the quality of the human environment that are likely to be highly controversial (40 CFR 1508.27(b)(4)). There are differing opinions in the biological community on the importance or role of habitat attributes associated with the goshawk and its prey. The controversy is with the differing sciences rather than the effects on the quality of the human environment. These differences, described in the EA (Chapter 3, section 3.3.4) focus primarily on canopy closures, densities of understories, and the amounts of mature and old forests in some home ranges. The alternatives developed in detail incorporated different combinations of these attributes to estimate the differences in environmental effects with application of the differing scientific opinions. No disagreements have been identified with the disclosure of effects in Chapter 4 of the EA. While some comments differed with our conclusion that goshawk populations would remain viable in Utah by implementation of Alternative F, the reasons for this difference are based on the scientific opinions, not with the disclosure of the effects.

Controversy in this context refers to cases where there is substantial dispute as to the size, nature or effect of the Federal action, rather than to opposition to its adoption. This decision does not alter current planning direction on *why* we need to manage (e.g. provide habitat to support viable populations of sensitive species) or *what* management actions can be taken (e.g. vegetative treatments to manage habitat). This decision focuses on new information related to the *how* (e.g. how vegetative treatments will be implemented to achieve habitat conditions), *where* (e.g. at-risk habitat) and *when* (e.g. priority on habitat at-risk) we need to manage habitat.

f. The proposed management direction does not establish any highly uncertain, unique, or unknown risks (40 CFR 1508.28(b)(5)). The best available scientific information specific to forested habitats in Utah provided the foundation for designing the proposed management direction (EA, Chapter 1, section 1.2). Measures proposed for adoption are consistent with the management direction adopted for management of goshawk habitat on other National Forest System lands such as in the Southwestern Region of the USDA Forest Service (Region 3), and the Targhee National Forest. It is similar in intent with the direction proposed in the Interior Columbia Basin Ecosystem Management Project and currently being developed in the Sierra Nevada Framework Project.

g. The proposed management direction does not establish a precedent for future actions with significant effects and does not represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6), nor is it related to other actions with individually insignificant but cumulative significant impacts (40 CFR 1508.27(b)(7)). The Environmental Assessment discloses the projected cumulative effects (EA, Chapter 4, section 4.1.2) of adopting the management direction on habitat conditions and trends on land within the forested landscapes administered by the Forest Service within Utah. The discussion includes currently evolving policies including roads, roadless and lynx. These cumulative effects are not considered to be significant at the state-wide scale and timeframe covered by this analysis and decision. Project analysis at the local scale will again

consider the cumulative impacts and make a determination of significance. Additionally, when forest plans are revised, the cumulative effects will again be analyzed at the forest-scale.

The proposed management direction is a short-term effort to retain the environmental status quo until forest plan revision on the six affected national forests is completed. The temporary nature of the proposed management direction would limit its effects. Any long-term strategy would be founded on the appropriate NEPA documentation and analysis and not on the short-term direction for goshawk management until the forest plans are revised.

h. The proposed management direction would not adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (40 CFR 1508.27(b)(9)). A biological assessment evaluating impacts to threatened and endangered species found in Utah has been prepared for this project. A draft is located in Appendix H of the EA and a final has been completed which is available in the project record. The US Fish and Wildlife Service has concurred with our determination of "may affect but not likely to adversely affect" determination for Canada lynx and Mexican spotted owl and "no effect" determination for other threatened and endangered species and critical habitat.

i. The proposed management direction does not threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)). Adoption of the selected alternative would not significantly affect the following elements of the human environment, which are specified in statute, regulation, or executive order: Air Quality, Cultural Resources, Farm Lands (prime or unique), Floodplains, Native American Religious Concerns, Hazardous or Solid Wastes, Water Quality, Wild and Scenic Rivers, and Wilderness. The Navajo Nation did comment on the EA regarding the sacred nature of hawks and their part today in sacred ceremonies and the oral traditions of the Navajo elders. They have no concerns or objections regarding the project at this time, but they reserve the right to offer and submit undiscovered information in the future, if need be.

Finding

On the basis of the information and analysis contained in the EA and all other information available as summarized above, it is my determination that adoption of the proposed management direction (as reflected in Alternative F) until the six affected national forests complete forest plan revision (projected to be 4 years), does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an Environment Impact Statement is not needed.

6. Findings required by other laws and regulations

Finding Of Non-Significant Amendment

Under the National Forest Management Act (NFMA, 16 USC 1604(f)(4), forest plans may "be amended in any manner whatsoever after final adoption and after public notice, and, if such amendment would result in a significant change in such plan, in accordance with subsections (e) and (f) of this section and public involvement comparable to that required by subsection (d) of this section." The NFMA regulations at 36 CFR §219.10(f) state: "Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the plan."

The Forest Service Land and Resource Management Planning Handbook (Forest Service Handbook 1909.12) provides a framework for consideration, section 5.32, lists four factors to be used when determining whether a proposed change to a forest plan is significant or not significant: (a) timing; (b) location and size; (c) goals, objectives and outputs; and (d) management prescriptions. I have evaluated the proposed management direction and concluded that it does not constitute a significant amendment of the 6 forest plans in Utah (Ashley, Dixie, Fishlake, Manti-LaSal, Uinta, and Wasatch-Cache) for the reasons described below:

a. Timing. The timing factor examines at what point, over the course of the forest plan period, the Plan is amended. Both the age of the underlying documents and the duration of the amendment are relevant considerations. The handbook indicates that the later in the time period, the less significant the change is likely to be. All of the forest plans affected are nearing the end of the first planning period. As noted in the EA (Chapter 1, section 1.4.2 and 1.6; Chapter 4, section 4.1), the action is limited in time and changes to the Plans are not intended to be permanent. The proposed management direction will be in place until efforts to revise forest plans are complete (projected to be 4 years), supports the determination that they do not constitute significant amendments of the forest plans.

b. Location and Size. The key to the location and size is context, or "the relationship of the affected area to the overall planning area, "the smaller the area affected, the less likely the change is to be a significant change in the forest plan." As discussed in the EA (Chapter 2, section 2.3.2), the proposed management direction applies only to proposed and new projects that fall on that portion of the total 8.1 million acres of National Forest System lands on the six affected national forests that are forested and are not within an exemption category. Exempted areas, such as wilderness (EA, Chapter 2, section 2.3.2, Table 1) cover 1.2 million acres, or about 15% of the total acres. Forested acres affected by future timber harvest or wildland fire projects proposed prior to forest plan revision (projected to be 4 years) that would use the proposed management direction in design and implementation would be a small subset of this total; less than 1% of the acres annually across six national forests. (Chapter 4, section 4.3.1).

There would be limited effects to some grazing permits during the life of this amendment. Changes to permits would only occur in those landscapes where grazing can be attributed as a causal factor to an at-risk condition. The number of allotments likely to be affected in 4 years is a small percentage of the total 539 active allotments on the six Utah National Forests (Chapter 4, section 4.5.2). Thus, the size of the area projected to be affected during this time period is very small when compared to the total in the planning area.

In addition to vegetation treatments and grazing activities, all other projects anticipated in the next four years, like campground developments, special use permits and minerals, would still be a very small portion of the total National Forest System acres in Utah that are affected by the management direction (EA, Chapter 2, section 2.4; and Chapter 4, Effects by Resource).

c. Goals, Objectives, and Outputs The goals, objectives, and outputs factor involves the determination of "whether the change alters the long-term relationship between the level of goods and services in the overall planning area" (Forest Service Handbook 1909.12, section 5.32(c)). This criterion concerns analysis of the overall forest plan and the various multiple-use resources that may be affected. As discussed in the EA (Chapter 1, section 1.5.3 and Chapter 2, section 2.3.2), the

proposed management direction would apply only to proposed or new projects following adoption of this amendment.

The new goal and objective in Alternative F (EA, Appendix A) help move toward the existing forest plan goals and objectives related to threatened and endangered and sensitive species and their habitat for each National Forest in Utah. Thus, the proposed management direction does not significantly alter the long-term relationships between the levels of goods and services projected by the forest plans.

The guidance in Forest Service Handbook 1909.12, section 5.32(c) explains: "In most cases, changes in outputs are not likely to be a significant change in the forest plan unless the change would forego the opportunity to achieve an output in later years." Any short-term temporary reductions in outputs do not foreclose opportunities to achieve such outputs in later years. Again, the proposed management direction does not foreclose the achievement of existing goals and objectives.

d. Management Prescriptions The management prescriptions factor involves the determination of (1), "whether the change in a management prescription is only for a specific situation or whether it would apply to future decisions throughout the planning area" and (2), "whether or not the change alters the desired future condition of the land and resources or the anticipated goods and services to be produced" (Forest Service Handbook 1909.12, section 5.32(d)).

Implementation of direction in Alternative F will provide for consistency in management of habitat on the National Forest System lands in Utah. The desired future conditions and long-term levels of goods and services projected in current plans are not substantially changed by the proposed management direction. The proposed management direction will work to accomplish an element of the multiple-use desired future condition currently described in forest plans by providing habitat needed to support viable populations of goshawks, a sensitive species.

As noted above, the proposed management direction is short-term and applies only to a small portion of the overall planning area. Thus, the "anticipated goods and services" will not be greatly affected by proposed management direction. In adopting the proposed management direction (essentially mitigation measures) until forest plans for the six Utah National Forests are revised, the Plan amendments retain or improve the environmental status quo on a portion of the affected national forests.

For a detailed assessment of each National Forest in Utah, refer to the supplemental information reports (SIRS) completed by each national forest in the fall of 1998 and winter 1999 (available in the project records, Exhibit K and on the web site <http://www.fs.fed.us/r4/goshawk>). These SIRS contain preliminary NFMA significance findings at the individual forest scale that supports findings in this document.

Finding

On the basis of the information and analysis contained in the EA and all other information available as summarized above, it is my determination that adoption of the management direction reflected in Alternative F until the six affected national forests complete forest plan revision (projected to be 4 years), does not result in a significant amendment to these current forest plans.

No negative direct, indirect or cumulative effects to heritage resources, soil and water will occur because my decision is programmatic and does not supercede any of the direction currently in the forest plans that protects cultural sites, soils, and water resources. (EA, Chapter 4).

Environmental Justice was discussed in the EA (Chapter 3, section 3.4.1). It was determined that the local effects are not measurable at the state-wide scale and would not be disproportionate to low income or minority groups (Chapter 4, section 4.4.1).

7. Implementation date

The decision is effective 7 days after publication of the legal notice (36 CFR §217.10(a)). The anticipated date of publication is the end of March 2000.


8. Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 217.3. A written appeal must be postmarked or received in duplicate by the Appeal Reviewing Officer within 45 days of the date of publication of the legal notice of availability for this decision in the *Salt Lake Tribune* newspaper. The publication date is expected to be at the end of March 2000. Appeals must meet the content requirements of 36 CFR 217.9 and be mailed to:

Chief, USDA Forest Service
ATTN: Appeals Office, EMC, 3-Central
PO Box 96090
Washington, DC 20090-6090

9. Contact Person

For further information about this project, contact Peter W. Karp, Forest Supervisor, Uinta National Forest, PO Box 1428, Provo, Utah 84601, phone: 801-342-5100.


JACK A. BLACKWELL
Regional Forester
Intermountain Region

MAR 14 2000

Date

DIXIE FOREST PLAN AMENDMENT

Utah Northern Goshawk Project

The following conventions are used in this document:

Italicized print is text copied from the current Dixie Forest Plan.

Normal print is used for the amendment language.

(GUIDELINE) and **(STANDARD)** labels are bold and italicized in the amendment language.

Pg. IV-6

Goal No. 17. Manage classified species (bald eagle (E), peregrine falcon (E), Utah prairie dog (T), Astragalus perianus (E), Bonneville cutthroat trout (S), Colorado River cutthroat trout (S), (E=Endangered, T=Threatened, S=Sensitive) habitat to maintain or enhance their status through direct habitat improvement and agency cooperation.

Goal No. 17A: Restore or maintain forested landscapes in a properly functioning condition (PFC). Functioning forested landscapes provide habitat for the northern goshawk and its prey to support a viable population of goshawks in Utah.

Objective: For the remainder of the current planning period, prioritize treatment on at least 1000 acres where goshawk habitat areas are rated as high or optimum quality (per the process in Graham et al. 1999), and that are functioning-at-risk. Implement treatments that will provide reasonable assurance that areas will not drop to low to moderate value.

Additional forest-wide direction follows that has been added to the Standards and Guidelines for the Wildlife and Fish Management General Direction (pages IV-33a forward, for as many pages as required to insert the text), with cross-references to this new direction provided in other resource areas.

Pg. IV-25

Add a cross-reference on Page IV-25, GENERAL DIRECTION 4. (*minimum snags per acre*) that refers to new **Guidelines F. & G.** for snag and down log requirements in goshawk habitat.

Pg. IV-34

Add a cross reference under GENERAL DIRECTION 1. (*Use appropriate silvicultural practices to accomplish wildlife habitat objectives forestwide*) that refers to the new standards and guidelines that apply in goshawk habitat, found on amendment pages IV-33a forward.

Pg. IV-35

Add a cross reference under S&G 5.A. (*7-10% should be managed as old-growth*) that refers to the new **Guideline F.** for direction in goshawk habitat.

Pg. IV-36

Add a cross-reference as a new GENERAL DIRECTION 4. that refers back to the new **Guidelines U. & V.** on how to deal with ungulate grazing, if modifications are indicated.

Pg. IV-38

Add a cross-reference under GENERAL DIRECTION 2. that refers to the seasonal restrictions in the new **STANDARD P.**

Pg. IV-40

Add a cross-reference to the GENERAL DIRECTION 6. that describes the maximum size of openings in PFAs in the new **Guideline T.**

Pg. IV-33a, continuing with IV-33b, 33c, etc., for as many pages as required to accommodate this STANDARDS and GUIDELINES text:

Mgmt Activity	GENERAL DIRECTION	STANDARDS and GUIDELINES
	3. <i>Manage habitat for viable populations of all existing vertebrate species</i>	A. (Guideline) Management actions should be designed to encourage conditions that are within the historic range of variation (HRV) as defined by Regional or local properly functioning condition (PFC) assessments. PFC operates within the range of HRV where extreme events are not desired. Actions should remain within the variability of size, intensity, and frequency of native disturbance regimes characteristic of the subject landscape and ecological processes.
		B. (Guideline) Within disturbed ecosystems, management actions should be designed to be consistent with restoration objectives.
		C. (Guideline) Utilize native plant species from locally adapted seed sources in management activities when and where practical. Non-native plant species have the potential to cause systems to move outside of historic range of variation (HRV), therefore the use of non-native species should be justified to indicate how their use is important to maintain or restore a cover type to functioning conditions.

D. **(Guideline)** When initiating vegetative management treatments in forested cover types, provide for a full range of seral stages, by forested cover type, that achieve a mosaic of habitat conditions and diversity. Each seral stage should contain a strong representation of early seral tree species. Recruitment and sustainability of early seral tree species in the landscape is needed to maintain ecosystem resilience to perturbations.

E. **(Guideline)** Planned vegetative management treatments (excluding unplanned and unwanted wildland fire) in *the* mature and/or old structural groups in a landscape that is at or below the desired percentage of land area in mature and old structural stages (40% conifer, 30% aspen), should be designed to maintain or enhance the characteristics of these structural stages. Within these landscapes the percentage of land area in mature and old structural stages treated should not move out of the mature and old structural stage. Planned treatments may vary from this guideline if the action was assessed through the biological evaluation (BE) process, and the BE concluded that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.

F. **(Guideline)** When initiating vegetative management treatments in forested cover types, leave the following minimum number and size of snags. If the minimum number of snags is unavailable, green trees should be substituted. If the minimum size is unavailable, then use largest trees available on site. It is desirable to have snags represented in all size classes above the minimum available on the site. The number of snags should be present at the stand level on average and, where they are available, distributed over each treated 100 acres. This distribution is needed to meet the needs of prey species that utilize this habitat.

COVER TYPE	MINIMUM SNAGS (PER 100 ACRES)	MINIMUM PREFERRED SIZE
Ponderosa Pine	200	18 Inch DBH <--> 30 Feet Tall
Mixed Conifer And Spruce/Fir	300	18 Inch DBH <--> 30 Feet Tall
Aspen	200	8 Inch DBH <--> 15 Feet Tall
Lodgepole And Aspen/Lodgepole	300	8 Inch DBH <--> 15 Feet Tall

- G. **(Guideline)** When initiating vegetative management treatments, prescriptions should be designed to retain the following minimum amount and size of down logs and woody debris. These habitat components should be present at the stand level on average and, where they are available, distributed over each treated 10 acres. This distribution is needed to meet the needs of prey species that utilize this habitat.

COVER TYPE	Minimum Down Logs	Minimum Log Size	Minimum Coarse Woody Debris ≥ 3 inch diameter
	(per 10 acres) Down logs take precedence over tons of coarse woody debris	(Diameter <---> Length) (Mid-point diameter; or if minimum size not available, largest available on the site)	(Tons per 10 acres, inclusive of down logs)
Ponderosa Pine	30	12 inch <--> 8 feet	50
Mixed Conifer and Spruce/fir	50	12 inch <--> 8 feet	100
Aspen	50	6 inch <--> 8 feet	30
Lodgepole and Aspen/Lodgepole	50	8 inch <--> 8 feet	50

- H. **(Guideline)** - Vegetative treatments designed to maintain or promote a VSS 4, 5 and/or 6 group, the percent of the group acreage covered by clumps of trees with interlocking crowns should typically range from 40-70% in post-flegling and foraging areas, and 50-70% in nest areas. To manage outside this range, it should either be shown that the range is not within PFC for the site and the biological evaluation process determines that managing outside the range will be consistent with landscape needs of the goshawk and its prey. Use the best information available and deemed most reliable to make determinations. Groups are made up of multiple clumps of trees. Groups should be of a size and distribution in a landscape that is consistent with disturbance patterns defined in Regional or local proper functioning condition assessments (PFC). Clumps typically have 2 to 9 trees in the VSS 4, 5 or 6 size class with interlocking crowns.

- I. **(STANDARD)** Use the latest Regionally accepted Biological Prefield Research form (USFS Region 4) to determine the level of goshawk field survey(s) needed to complete the Biological Evaluation. Completion of this form is required to document where surveys are not required.

- J. **(STANDARD)** Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted at least one year prior to implementation of management actions.

- K. **(Guideline)** Where goshawk field surveys are required and when project planning permits, two consecutive years of surveys for territory occupancy prior to implementation of management actions is preferred.
- L. **(Guideline)** If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied.
- M. **(STANDARD)** When an active nest area has been identified, identify 2 alternate nest areas and 3 replacement nest areas. The next two guidelines provide recommended direction for implementation of this standard.
- N. **(Guideline)** Each nest area (active, alternate and replacement) should be approximately 30 acres (total of approximately 180 acres) in size when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available
- O. **(Guideline)** Alternate nest areas should be identified in suitable habitat with similar vegetative structures as the active nest areas. Replacement nest areas should be identified in habitat which will develop similar vegetative structures as the active nest area at the time the active and alternate nest areas are projected to no longer provide adequate nesting habitat.
- P. **(STANDARD)** Prohibit forest vegetative manipulation (timber harvest, prescribed burning, fuelwood, thinnings, weedings, etc.) within active nest areas (approximately 30 acres; i.e. **Guideline N.**) during the active nesting period. The active nesting period will normally occur between March 1st and September 30th. For non-vegetative manipulation activities (such as road maintenance, oil and gas exploration, recreation sites, etc.), adjacent to a new nest site, or a new activity adjacent to an established nest, **Guideline Q.** applies.
- Q. **(Guideline)** In active nest areas (approximately 30 acres; i.e. **Guideline N.**), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. If the disturbance is likely to result in abandonment, a biological evaluation (BE) must be completed. To implement the action, the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.
- R. **(Guideline)** Forest vegetative manipulation within active, alternate and replacement nest areas should be designed to maintain or improve desired nest area habitat. Use the active nest area habitat characteristics as an indicator of the desired nest area habitat, and as the best available information for nest area habitat for that cover type.

S. **(Guideline)** Identify a Post-Fledgling Area (PFA) which encompasses the active, alternate and replacement nest areas and additional habitat needed to raise fledglings. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.

T. **(Guideline)** Forest vegetative manipulation within the PFAs should be designed to maintain or improve the same habitat features as discussed for the goshawk home range (i.e., stand structure, snags, down logs, nest trees important in the life histories of the goshawk and its prey species common to the geographic location), except:

- a) Openings, as defined in glossary and Reynolds et al., created as a result of mechanical vegetative treatments (does not include wildland fire) should not exceed the following by cover type:

Cover Type	Maximum Created Opening Size
Ponderosa Pine and Mixed Conifer	2 acres
Spruce/fir	1 acre
Aspen and Lodgepole pine	Follow current management direction

- b) Management activities should be restricted during the active nesting period. The active nesting period will normally occur between March 1st and September 30th.
- c) Where timber harvest is prescribed to achieve desired forest conditions, **plan the transportation system to minimize disturbance to the PFAs**. For example, small, permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk PFAs. Variance may occur if it is determined that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to PFA habitat.

U. **(Guideline)** Through the landscape assessment process identify plant communities important to goshawk prey species that contain seed, mast, and foliage components that are important to these prey species.

V. **(Guideline)** Where it is determined through the landscape assessment process that ungulate grazing is contributing to an identified functioning-at-risk condition relative to habitat needed to support goshawk and its prey, modify grazing practices to maintain or restore the desired seed, mast, and foliage production defined in the landscape assessment process. Review success of modifications annually. If modifications are not providing for the desired progression toward production objectives defined in the landscape assessment, modify practices through the next annual operating plan. This guideline does not apply to non-forest patches.

W. **(Guideline)** To help determine opportunities for habitat maintenance or enhancement for goshawk and *its* prey, conduct landscape analyses at the 5th to 6th order HUC or equivalent ecological scale (10's to 100's of thousands of acres). These assessments provide information concerning resource conditions, risks, and opportunities in a systematic way, thereby enhancing the agency's ability to estimate direct, indirect, and cumulative effects of management actions that may affect habitat for the goshawk and its prey. With this information in hand, managers have a better opportunity to balance the needs of resources and humans and are less likely to negatively impact far-ranging species such as the northern goshawk or other species of concern. Essentially, actions are proposed within the context provided by the landscape assessment. As a minimum, landscape assessments should describe current status of resources, risks and opportunities (as discussed below) using the best information available locally at the time of the assessment.

- *Status* is the condition of the resources relative to the historical condition. The historical condition should be depicted through the identification of the historic range of variation (HRV) for the resource attribute of interest (i.e., forest structure, composition, canopy closure), as defined in Regional or local properly functioning condition (PFC) assessments.
- *Risk* should include both short- and long-term risks of adversely affecting the current condition of these resources (i.e., insect, disease, wildfire, human related development).
- *Opportunities* are situations where either improvements in resource condition or a reduction in risk can be achieved in a landscape through some form of subsequent management decisions. These decisions will be made either through site-specific project decisions or future adjustments in land use plans, both of which include additional analysis and public involvement.

Landscape assessments are not necessary where the Forest or project interdisciplinary team determine that the intent of the assessment has been met through other analytical processes. Meeting the intent means that sufficient information exists concerning resource conditions and risks to understand the effects (direct, indirect, and cumulative) of a proposed site-specific project on goshawk habitat relative to the broader landscape context.

X. **(STANDARD)** When non-vegetative management activities (for example: land exchanges, recreation facility development, ski resort construction, utility corridors, etc.) are proposed that would result in loss of suitable goshawk habitat, sufficient mitigation measures will be employed to insure an offset of the loss. The biological evaluation (BE) process will be used to document findings, recommend mitigation measures, and evaluate consistency with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.

Y. **(Guideline)** To provide the greatest reduction in risk to loss of habitat needed to support goshawk populations across Utah, treat those acres rated as high or optimum value to goshawks and its prey that are at risk to dropping into the low or moderate value. Variance in this prioritization may occur when management objectives for goshawk habitat in concert with other resource needs, necessitate. In these cases, changes to the quality of goshawk habitat across a landscape should not impact meeting landscape habitat objectives for goshawk habitat quality, quantity and connectivity identified in the landscape assessment.

Clarification of Desired Habitat Conditions for Prey Species
Especially related to ungulate grazing

Guideline g-28 gives direction to use the landscape assessment process to identify plant communities important to prey species that contain **seed, mast and foliage components** needed. Overall, the greatest variety of species that can produce seed and mast are associated with mid-seral stages. Guideline g-29, then, directs that these components be maintained or restored. *The intent is to have utilization levels of grasses and forbs that maintain native foods and cover for prey species.*

Further components of desired habitat conditions for prey species from Reynolds' work, and the guidelines that address these components, include:

1. **Snags** for woodpecker feeding and nesting, mammal nests, & bird perches (g-9)
2. **Downed logs** for cover, feeding and nesting for a variety of prey (g-11)
3. **Woody debris** to provide cover and feeding for a variety of vertebrates (g-11)
4. **Openings** for food and cover (g-25 for PFAs)
5. **Large trees** for nesting, denning, feeding, roosting, cone production and hunting perches (g-15)
6. **Interspersion** (intermixing) of vegetative structures (g-7 & g-15)
7. Promotion of **aspen regeneration** (g-5) and growth of **native grasses** (g-4).

Herbaceous shrubs and intact forest soils, with emphasis on organic surface layers with natural turnover rates, are other identified components of desired habitat conditions for prey species that are not specifically included in the guidelines.

The direction in g-28 and g-29 is that, as part of the landscape assessment process and as grazing allotments are updated, all of these components be evaluated toward achievement of desired habitat conditions for prey species. Appropriate courses of action, such as a change in pasture rotation, shorter seasons of use, or reductions in numbers of livestock, would then be determined at the site-specific level. Additionally, if wild ungulate grazing is determined to be part of the problem, immediate contact with UDWR would be made for resolution.

MONITORING REQUIREMENTS

ID	Goals & Obj.	Standards & Guidelines	Question	Item to Measure	Acceptable Range	Measurement Frequency	Report Frequency
m- 1	G-10	all under the alternative goal	Are known goshawk territories on national forests remaining occupied?	Goshawk territory occupancy at the forest level.	Less than 20% decline in territory occupancy over a 3 year period.	Annually	Every 3 years
m- 2	G-10	s-9 G-21	Are mitigation measures (standards and guidelines) employed during vegetative management project implementation sufficient to prevent territory abandonment?	Goshawk territory occupancy following vegetative management treatments.	No territory abandonment on projects where mitigation measures are used.	The first full breeding period following activity in all projects where pre-project surveys determined territory occupancy.	annually
m- 3	G-10	g-7	Is habitat connectivity, as represented by structural and species diversity and dispersion thereof, within and among 5th to 6th order watersheds (or equivalent ecological scale) being maintained?	Spatial dispersion and patch size of mature and old forest groups within a 5th to 6th order watershed. Tree species composition mix within mature and old groups within a landscape.	Approximately 40% of the coniferous and/or 30% of the aspen forested acres within a landscape are in VSS 5 and 6 classes. Seral species characteristic of the cover type are well represented in VSS 5 and 6 classes.	Completion of each landscape assessment	Every 5 years
m- 4	G-10	g-9	Is snag habitat (i.e., number and size of snags) being maintained in desired spatial arrangement?	Snag densities and sizes within a 100 acre block treated by mechanical or wildland fire use.	75% or more of the blocks measured meet guideline requirements.	10% or more of the acres treated within a project area, within 2 years following completion of the vegetative treatment.	Every 5 years
m- 5	G-10	g-11	Are down woody material and logs being maintained in sufficient amounts, sizes and spatial locations?	Down log and woody debris amounts and sizes within a 10 acre block treated by mechanical or wildland fire use.	75% or more of the blocks measured meet guideline requirements.	5% or more of the acres treated within a project area, within 2 years following completion of the vegetative treatment.	Every 5 years
m- 7	G-10	g-28 g-29	Are appropriate adjustments made to grazing practices in identified "at-risk" locations where grazing is contributing to the "at-risk" condition?	Ungulate grazing practices (i.e.- utilization, season of use, grazing system) in identified "at-risk" locations.	Grass, forb, and shrub production objectives are within the range identified in landscape assessments.	Grazing practices reviewed annually on at least 2 allotments where "at-risk" conditions have been identified.	Every 5 years

Monitoring Exhibits

The following task sheets are Exhibits to help during implementation for each monitoring requirement. Changes to these task sheets will not require a Forest Plan Amendment.

Task Sheet m-6 is intentionally missing because it doesn't apply to the selected alternative.

Task Sheet for Monitoring Requirement "m-1"

Goal/DFC: 10 Restore or maintain forested landscapes in a properly functioning condition (PFC).

Objective: _____

Standard: _____

Monitoring purpose: Track trends in goshawk territory occupancy across the state.

Question(s): Are known goshawk territories on the NFS lands remaining occupied?

Monitoring item: Territory Occupancy- a territory is occupied if evidence of use is present; nesting does not need to be documented.

Range of acceptable results: Less than 20% decline in territory occupancy over a 3 year period on a National Forest.

Reliability: moderate Precision: high

Collection of Information

Who collects: Forest or District Biologist; or Utah Division of Wildlife Resources (partners) (district, research, co-op, etc.)

Method of collection: Most current Regional Protocol for field and data collection. (specific)

Time and frequency of collection: Annual. 50% of known territories or all if less than 20

Source of data (field, research, data base, etc.): field

Cost of collections: \$300/nest

Analysis/Evaluation of Findings

Who conducts: Forest Biologist and UDWR

Method of analysis: Statistical analysis by UDWR of trends in occupancy across Utah. Forest tabulation of findings annually.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: \$300

Total cost of monitoring: \$300/nest plus \$300 for analysis

Report of Findings

Information to be reported: Trend in occupancy by forest and all forests in Utah

Frequency of report: every 3 years

Method of reporting: Written summary of results for Forest Monitoring Report, forest and state database.

Target audience for report: Agency biologists and leadership teams

Task Sheet for Monitoring Requirement "m-2"

Goal/DFC: 10 _____ Restore or maintain forested landscapes in a properly functioning condition (PFC).
Objective: _____
Standard: _____
Guideline g-21 _____ Restrict management activities within PFA during active nesting period.
Monitoring purpose: To determine if guidelines are being implemented and are effective.
Question(s): Are mitigation measures employed during vegetative management projects sufficient to prevent territory abandonment?
Monitoring item: Territory Occupancy surveys of active territories, after activity.
Range of acceptable results: No territory abandonment.
Reliability: moderate Precision: High

Collection of Information

Who collects: District or Forest Biologist or Utah Division of Wildlife Resources (partners) (district, research, co-op, etc.)
Method of collection: Most current regional protocol for territory surveys for field survey (specific) and data collection. All active territories where treatments occur.
Time and frequency of collection: First full season after treatment
Source of data (field, research, data base, etc.): Field
Cost of collections: \$300/nest

Analysis/Evaluation of Findings

Who conducts: Forest Biologist
Method of analysis: Presence or absence
Results:
Within range of acceptable results: Y N
Monitoring purpose achieved: Y N
Further monitoring required: Y N
Recommended actions: Y N
Recommended actions implemented: (Date)
Cost of A/E: N/A
Total cost of monitoring: \$300/nest

Report of Findings

Information to be reported: Were measures sufficient to maintain occupancy of territory.
Frequency of report: Annual
Method of reporting: Written summary and nest database
Target audience for report: Forest and District leadership teams

Task Sheet for Monitoring Requirement "m-3"

Goal/DFC: 10 Restore or maintain forested landscapes in a properly functioning condition (PFC).

Standard: _____

Guideline: g-5 ...provide for a full range of seral species...

g-7 ...treatments in mature/old VSS in landscapes that are at or below desired amount should be designed to maintain or enhance these VSS...

Monitoring purpose:

Question(s): Is habitat connectivity, as represented by structural and species diversity and dispersion thereof, within 5th and 6th order watersheds (or equivalent ecological scale) being maintained?

Monitoring item: Percent of coniferous forest and aspen forest in mature and old stages, distribution of mature and old, and representation of early seral species.

Range of acceptable results: At least 40% of the coniferous and/or 30% of the aspen forested acres within a landscape are mature and old classes. Mature and old structures are distributed across the landscape in patterns that are representative of HRV (as defined by PFC alt. C,D and F). In Alternative E, no reduction in mature and old forests. Seral species characteristic of the landscape are well represented.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Interdisciplinary Team (district, research, co-op etc.)

Method of collection: GIS, aerial photography, forest inventory data, surveys

Time and frequency of collection: Whenever landscape assessments are implemented

Source of data (field, research, data base, etc.): Data base, local knowledge

Cost of collections: Highly variable depending on current data base and size of landscape, costs would be part of the landscape assessment process.

Analysis/Evaluation of Findings

Who conducts: Interdisciplinary Team

Method of analysis: Comparison of data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: Highly variable depending on current data base and size of landscape, costs would be part of the Landscape assessment process.

Total cost of monitoring: Highly variable depending on current data base and size of landscape, costs would be part of the Landscape assessment process.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: Landscape Assessment Document

Target audience for report: Forest & Regional Office

Task Sheet for Monitoring Requirement "m-4"

Goal/DFC: 10 _____ Restore or maintain forested landscapes in a properly functioning condition (PFC).
Objective: _____
Standard: _____
Guideline: g-9 _____ When initiating vegetative treatments in forested cover types, leave the following minimum number and size of snags.
Monitoring purpose:
Question(s): Is snag habitat (number and size of snags) being maintained in desired spatial arrangement?
Monitoring item: Number and size of snags per 100 acres within vegetation treatment areas.
Range of acceptable results: At least 75% of the measured blocks meet objectives.
Reliability: High Precision: High

Collection of Information

Who collects: Stand Examination Crew or Biological Technician
(district, research, co-op, etc.)
Method of collection: Field plots, preferably collected during otherwise scheduled post-treatment examinations.
(specific)
Time and frequency of collection: Once, within 2 years of completion of veg. treatment. 10% of project acres.
Source of data (field, research, data base, etc.): Field Data
Cost of collections: \$100-500 per 100 acres

Analysis/Evaluation of Findings

Who conducts: Silviculturist and Biologist (Forest or District level)
Method of analysis: Comparison of measured data to desired conditions.

Results:

Within range of acceptable results: Y N
Monitoring purpose achieved: Y N
Further monitoring required: Y N
Recommended actions: Y N
Recommended actions implemented: (Date) _____
Cost of A/E: \$250
Total cost of monitoring: \$250 + \$100-500 per 100 acres.

Report of Findings

Information to be reported: Degree of successful attainment of objective.
Frequency of report: Every 5 years
Method of reporting: 5-year Monitoring Report for Forest
Target audience for report: General & Regional Office

Task Sheet for Monitoring Requirement "m-5"

Goal/DFC:	<u>6</u>	<u>Management of forest vegetation to promote adequate</u>
Alt F	<u>10</u>	<u>Restore or maintain forested landscapes in a properly</u>
		<u>functioning condition (PFC).</u>
Objective:		
Standard:		
Guidelines	<u>11</u>	<u>When initiating vegetative management treatments,</u>
		<u>prescriptions should be designed to leave the following</u>
		<u>minimum number of down logs and woody debris.</u>

Monitoring purpose:

Question(s): Are down woody debris and logs being maintained in sufficient amounts,
sizes and spatial location?

Monitoring item: Numbers and size of down logs, tons of down woody debris.

Range of acceptable results: At least 75% of the measured blocks meet objectives.

Reliability: High Precision: High

Collection of Information

Who collects: Stand Examination Crew or Biological Technician
 (district, research, co-op, etc.)

Method of collection: Field plots, preferably collected during otherwise scheduled post-
 (specific) treatment examinations.

Time and frequency of collection: Once, within 2 years of completion of veg. treatment.
5% of project acres.

Source of data (field, research, data base, etc.): Field Data

Cost of collections: \$5-10 per 10 acres

Analysis/Evaluation of Findings

Who conducts: Silviculturist and Biologist (District or Forest level)

Method of analysis: Comparison of measured data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: \$250

Total cost of monitoring: \$250 + \$5-10 per 10 acres.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: 5-year Monitoring Report for Forest

Target audience for report: General & Regional Office

Task Sheet for Monitoring Requirement "m-7"

Goal/DFC: 10 Restore or maintain forested landscapes in a properly functioning condition (PFC).
Objective: _____
Standard: _____
Guideline: g-28 & g-29 Management of grass, forb and shrub vegetation within forested cover types to promote adequate production of forage, mast and seed for goshawk prey species.

Monitoring purpose:

Question(s): Are appropriate adjustments made to grazing practices in identified "at-risk" locations where grazing is contributing to the "at-risk" condition?

Monitoring item: Ungulate grazing practices in identified at-risk locations.

Range of acceptable results: Results are within acceptable bounds as identified in the landscape assessment.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Rangeland Specialist

(district, research, co-op, etc.)

Method of collection: Field inspection; ocular to actual measurement depending on factor addressed.

Time and frequency of collection: Annually in allotments where "at-risk" conditions have been identified; however, no more than 2 per forest required per year.

Source of data (field, research, data base, etc.): Field data

Cost of collections: \$250 to \$3500 per allotment depending on element being measured.

Analysis/Evaluation of Findings

Who conducts: Rangeland Specialist

Method of analysis: Comparison of data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: \$50 per allotment measured.

Total cost of monitoring: \$150 to \$3550 per allotment depending on element being measured; \$300 to \$7100 per national forest.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: Allotment inspection forms / records.

Target audience for report: Forest & Regional Office